

THE MALE OF *NEOCHEYLETIELLA ARTAMI* DOMROW (ACARI:
CHEYLETIDAE)

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Synopsis

The male of *Neocheyletiella artami*, a cheyletid mite parasitic on wood-swallows, is described; it exhibits a peculiar caudal process unknown in its congeners.

Of the eleven taxa originally assigned to *Neocheyletiella* Baker (see Baker, 1949; Lawrence, 1959), two (*pinguis* Berlese and *canadensis* Banks) have been transferred to *Ornithocheyletia* Volgin (1964), and seven (*chanayi* Berlese and Trouessart, *microrhyncha* Berlese and Trouessart, *heteropalpus* Mégnin, *macronycus* Mégnin, *subquadrata* Lawrence, *transvaalica* Lawrence, and *faini* Lawrence) to *Bakericheyla* Volgin (1966).

To the remaining two species (*rohveri* Baker, type-species, and *smallwoodae* Baker), Volgin (1966) added *Ornithocheyla megaphallos* Lawrence, while Domrow (1966) described the female of a fourth species, *N. artami*. Its male is now described, but as its peculiarities are only of a secondary sexual nature, no change in status is proposed.

The closely related *Cheyletiella parasitivorax* (Mégnin) causes a pruritic rash both in household animals (cats, dogs, rabbits) and man (Moxham, Goldfinch, and Heath, 1968; Thomsett, 1968).

NEOCHEYLETIELLA ARTAMI DOMROW

Material examined: One paratype female from a dusky wood-swallow, *Artamus cyanopterus* (Latham) (Artamidae, Passeriformes), Exeter, Tas., 9.iv.1964, R. H. Green. One male, twelve females, and two nymphs from *A. cyanopterus*, Dunedoo, N.S.W., 4 and 6.vi.1968, Carolyn Nelson.

Male: Idiosoma 335 μ long, ovate, with greatest width just in front of coxae III (Figs 1-2). Anterodorsal shield strongly tapered anteriorly, broadly rounded posterolaterally, and irregular in outline posteromedially; bearing four short, nude setae submarginally. Middorsal shield irregular in outline, bearing six minute setae at genital aperture and two long, ciliated setae posteriorly. Aedeagus sinuous, sharply pointed. Posterolateral shield elongate, parallel-sided, and with two triangular processes posteriorly; these latter protrude above caudal process, largely obscuring two stout setae in resultant cavity. Apex of opisthosoma flared, more darkly coloured than remainder of body, with irregular surface and outline except for median trilobe. Dorsal cuticle with 16 long, ciliated setae arranged 4.3+3.2.2.2; annulations largely parallel to lateral margins of shields.

Venter anteriorly as in female except that coxal apodemes I are fused medially. Coxal apodemes IV incorporated into broad shield covering remainder of venter in front of caudal process, which latter bears irregular anal sclerotization and two heavy, nude setae. Cuticular annulations on coxae I-II parallel to apodemes, but transverse between coxae III.

Legs and capitulum as in female except that inner claw on tarsi II is much larger than outer.

Female: Nothing need be added to the original description except that the palpal tibia and tarsus each have three nude setae, and the latter a sensory rod.

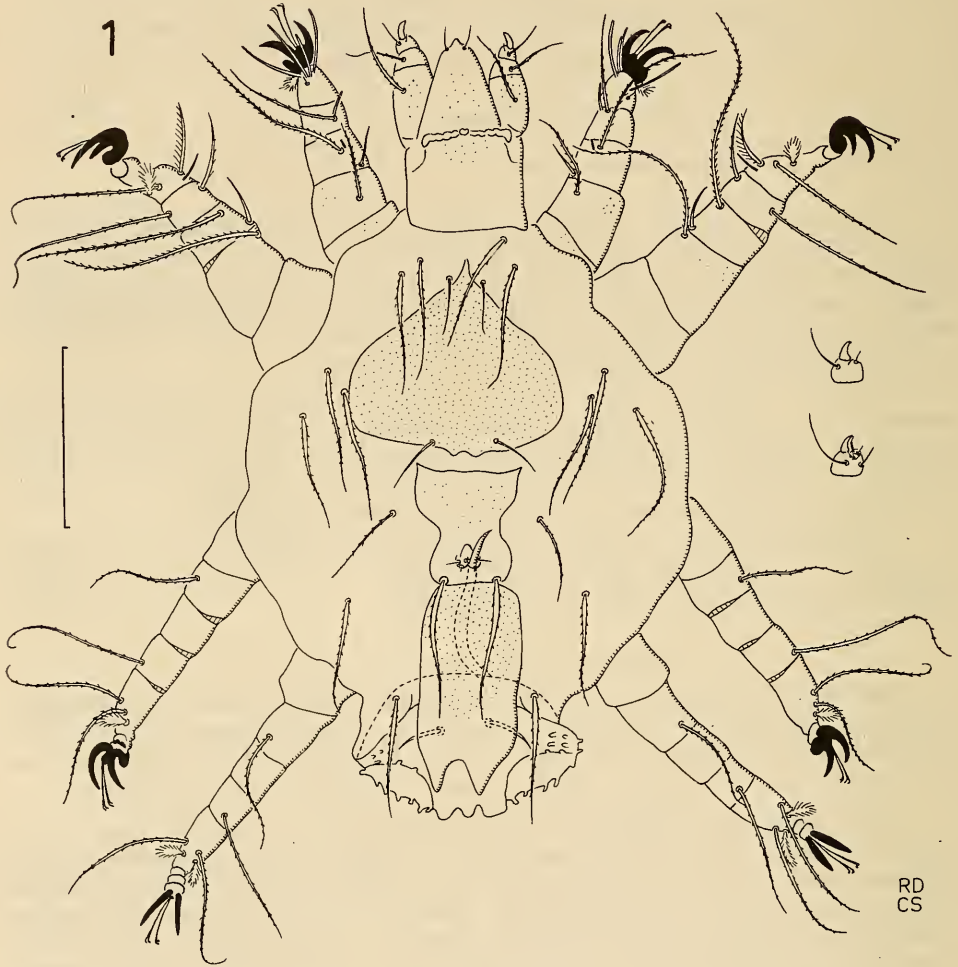


Fig. 1. *Neocheylettiella artami* Domrow.—Dorsum of male, with insets of palpal tibiotarsus of female. (All scales = 100μ).

Nymph: Similar to female except for transversely oval, sculptured, posterodorsal shield (which shows two slight posterolateral depressions suggestive of maleness), and absence of two adanal, and two anal, setae (Figs 3-4). Idiosoma $385-440\mu$ long.

Acknowledgements

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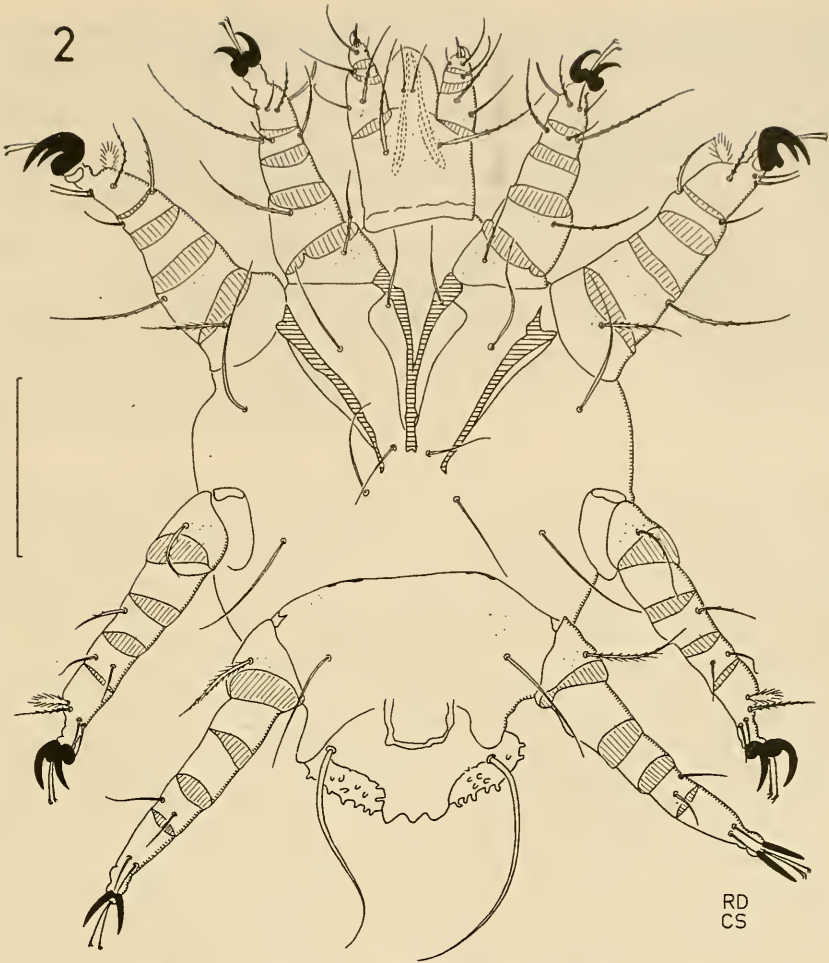
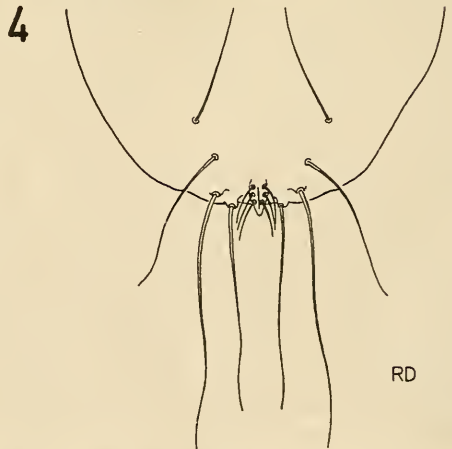
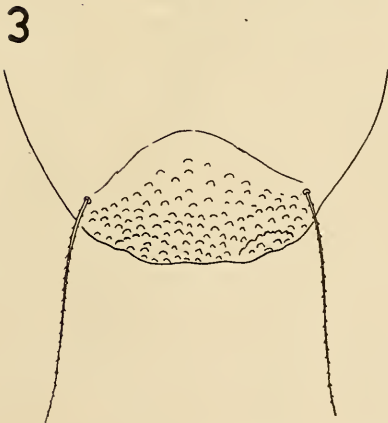


Fig. 2. *Neocheyletiella artami* Domrow.—Venter of male.



Figs 3-4. *Neocheyletiella artami* Domrow.—Dorsal and ventral views of apex of opisthosoma of nymph.

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